

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION	
Project Title: Pat Springs Water Pipeline Operation and Maintenance 2008-2009	Project No. 07-222
Region/GMU: Region II, GMU 7E	HPC: Williams-Flagstaff
Project Type: Waterline Operation	
Project Description: Continue the annual operation and maintenance of the Pat Springs Water Pipeline for 2 years (2008-2009)	
Wildlife Species to Benefit: Antelope, Elk, Mule Deer, Misc. Small game and other non-game species	
Possible Funding Partners:	
Implementation Schedule: Beginning: Spring 2008 Completed: Fall 2009	NEPA Compliance: (if applicable) Completed: Yes ____ No ____ Projected Completion Date:
PROJECT FUNDING	
SBG Funds Requested: \$3290	
Cost Share Funds: \$5952	
Total Project Costs: \$9242	
PARTICIPANT INFORMATION	
Applicant: Coconino Sportsmen, Tom Mackin (please print) Telephone: (928)213-3375 W (928)779-9127 H	Address: : PO Box 1301, Flagstaff, AZ.86002
AGFD Contact and Phone No. Larry Phoenix, (928)774-5045	
(If applicant is not AGFD personnel)	
Coordinated with: Larry Phoenix, Carl Lutch, AZG&F, M.Hanniman, USFS	Date: July 28, 2007
Applicant's signature:	Date:

**SEND COMPLETED APPLICATIONS TO:
Game Branch**

2221 W. Greenway Rd.
Phoenix, AZ 85023
mdisney@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? YES ____ NO x

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? IF SO WAS IT FUNDED?

Yes, Project has been submitted and funded each year since 1997

NEED STATEMENT/PROBLEM ANALYSIS: The north and east sides of the San Francisco Peaks provide excellent summer and winter habitat for wide variety of game and non-game species, except for a dependable source of water. While there are numerous earthen tanks and some natural depressions, there is no dependable supply of water throughout the 200-300 square miles under discussion. The Pat Springs Pipeline, a 40 mile long spring fed water supply, was originally built in the mid 1950's to provide water for livestock on numerous pastures throughout the grazing allotment but it fell into disrepair by the late 1980's. The Coconino Sportsmen were approached by the Forest Service in late 1996 to rehabilitate and operate the pipeline for 5 years and an agreement was signed at that time. The Coconino Sportsmen were members of the Flagstaff HPC and received partial funding for that initial 5 year period. Since that time, additional funding for 6 more years was received as well as several enhancements above normal maintenance and operation, including below ground, year round storage tanks and drinkers. All parties involved, including the USFS, AZG&F, HPC "partners" and numerous others have documented the widespread benefits to all species in the effected area. The Coconino Sportsmen have entered into a new agreement for continued operation and maintenance. Continuing our funding through the HPC process will enable the Coconino Sportsmen to operate, maintain and improve this valuable resource/water supply.

PROJECT OBJECTIVES: Our objective is to provide a dependable water supply for multiple wildlife species on approximately 100 square miles of critical wildlife range through the continuing operation and maintenance of the Pat Springs Pipeline. The main line, stretching over 40 miles with approximately 15 storage tanks and 33 drinkers with a total capacity of over 400,000 gallons, needs to be drained each fall, with over 100 drains, then reassembled in the spring, once temperatures can no longer cause freeze damage. The entire pipeline normally operates between early May and mid October with additional water provided from storage tanks to below ground drinkers year round on the most northern and eastern portion of the project at the lowest elevations.

PROJECT STRATEGIES: Through the use of the existing infrastructure, our maintenance and operation of the pipeline will provide a valuable commodity, potable, dependable water, for all wildlife in the outlined area. Throughout the operating season, the pipeline will be monitored at least weekly, with repairs being made as they are discovered. Supplies will be inventoried to maximize operating uptime and widespread distribution of the water throughout this area.

PROJECT LOCATION: The entire pipeline is on the Coconino National Forest, Peaks Ranger District. It is primarily located in Range 7 East, Township 23 North, starting in section 7 and it runs in a northerly and north easterly direction, with numerous branches.

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): USFS

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

HABITAT DESCRIPTION: The pipeline starts in the ponderosa pines and aspens of the White Horse Hills at an elevation of approximately 8600 feet and ends in mixed pinyon juniper and open grasslands at approximately 6000 feet.

ITEMIZED USE OF FUNDS: Funds will be utilized to pay for necessary plumbing supplies including pipe(s), valves, floats, adhesives and other consumables. The annual cost for plumbing supplies and consumables will be approximately \$500. In addition, funds will reimburse drivers for the fuel expenses throughout the operation season. Fuel expenses will be approximately \$620 per year. Replacement drinkers will cost approximately \$525 per year. Because the annual costs for both years are basically the same, if a partner would wish to only fund for one year or

if two partners want to share the costs, that would be acceptable to the applicant.

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION: The Coconino Sportsmen will provide all labor and coordination for the project, as we have since 1997. This equates to almost 400 hours in the field each year, from early Spring until early Fall, depending upon weather and road conditions. The pipeline is monitored weekly during this time and repairs made as they are discovered. The USFS has provided fence materials and some 1 ½ “ poly pipe. Other assistance has come from individuals with some of the “partner groups” and AZG&F personnel. Continued support from these individuals and agencies should continue for this next project period.

PROJECT MONITORING PLAN: The project is monitored at least weekly, depending upon water flows from the spring and other climatic conditions. Reports from AZG&FD, USFS, and other interested personnel also assist in monitoring activities.

PROJECT MAINTENANCE: The project is of an annual activity type to include all maintenance and operation. As in the past, additional enhancements adjacent to the project will be handled via separate project submissions.

PROJECT COMPLETION REPORT TO BE FILED BY: At the end of each year, a written report will be submitted to the funding group(s) by the Coconino Sportsmen outlining the annual activities as well as a written invoice to cover expenses incurred.

WATER DEVELOPMENT PROJECTS (see attached worksheet): Not actually a water development but worksheet is attached.

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):

ARIZONA GAME AND FISH DEPARTMENT WATER DEVELOPMENT WORKSHEET

PROJECT NAME: Pat Springs Water Pipeline Operation and Maintenance 2008-2009

- 1) **Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?"** Unknown
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
N/A
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8-10 ☒ 10-12 ☐ 12-14 ☐ 14-16 ☐ >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
☐ YES (please complete #5 below) ☒ NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank, etc.):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts?** ☐ YES ☒ NO
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.** N/A
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): ☒ 2x4 vehicles ☒ 4x4 only ☐ foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ☐ YES ☒ NO
-- Please describe any restrictions to public access:

Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired. As previously mentioned, approximately \$500 each year will be spent on various and miscellaneous plumbing supplies and consumables. The pipeline and drinkers are plumbed with 2", 1 1/2", 1 1/4" and 3/4" metal and plastic pipe and fittings. Approximately \$620 is earmarked for fuel at \$20/week for the 7-8 month work season. We have historically needed to replace at least one large Powder River type drinker each year at approximately \$525.
- 9)
- 10) **Was a site visit completed?** ☒ Yes ☐ No
If Yes, please list personnel that attended and date.
Carl Lutch, and Larry Phoenix, AZ. G&F Dept., numerous visits during past several years.